

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A process for recovery of a valuable sulphide mineral comprising:
providing a slurry containing the valuable sulphide mineral; ~~and~~
determining an Eh range within which the mineral may be recovered by flotation without the need of a collector[[,]]; and
~~and~~ subjecting the slurry to flotation in a pneumatic cell at ~~such~~ a rate such that the slurry remains with the Eh range during flotation.
2. (original) A process according to claim 1 wherein the slurry contains both a valuable sulphide mineral and non-valuable sulphide mineral(s), the slurry being subjected to flotation in a pneumatic cell at such a rate that flotation of the selected non-valuable mineral(s) is reduced or eliminated.
3. (previously presented) A process according to claim 1 wherein flotation in the pneumatic flotation cell is conducted at a neutral or slightly oxidising Eh.
4. (previously presented) A process according to claim 1 wherein the Eh range is between -100mV and +200mV.
5. (previously presented) A process according to claim 1 wherein the Eh range is between -50mV and +100mV.
6. (previously presented) A process according to claim 1 wherein the residence time in the pneumatic cell is below about two minutes.

7. (previously presented) A process according to claim 1 wherein the residence time in the pneumatic cell is between one and two minutes.

8. (previously presented) A process according to claim 1 wherein the residence time in the pneumatic cell is between one and 1.5 minutes.

9. (previously presented) A process according to claim 1 wherein the slurry is conditioned such that it falls within the predetermined Eh range, prior to entry into the pneumatic cell.

10. (previously presented) A process according to claim 1 wherein the rate of flotation is such that the normally required quantity of flotation additives and reagents to achieve the desired grade and recovery are not required.

11. (currently amended) A process according to claim 1 wherein the pneumatic flotation cell is selected from the group consisting of Jameson cells, EKOF cells, Bahr cells, contact cells, and Multotec turbo-column cells.

12. (previously presented) A process according to claim 1 wherein flotation is conducted in a near neutral and slightly alkaline environment.

13. (previously presented) A process according to claim 1 wherein the valuable sulphide mineral is chalcopyrite.

14. (previously presented) A process according to claim 1 wherein the non-valuable sulphide mineral(s) includes pyrite.

15. (currently amended) A process according to claim 1 wherein the Eh range of the slurry within which flotation occurs is that range within which the valuable sulphide mineral may be recovered by flotation without the need of a xanthate collector.

16. (previously presented) A process according to claim 13 wherein the valuable sulphide mineral further comprises chalcocite.

17. (previously presented) A process according to claim 16 wherein the chalcocite is also floated using a non-xanthate collector.

18. (currently amended) A method of improving recovery in a flotation circuit comprising adding a pneumatic flotation cell that functions as a scalper upstream of the flotation circuit, wherein a slurry containing ~~the~~ a valuable sulphide mineral is provided to the pneumatic cell and floated at such a rate that the slurry remains in a Eh range suitable for recovery by flotation without the need of a collector.

19. (original) A method according to claim 18 wherein the rate of flotation is selected such that residence time in the pneumatic cell is below about two minutes.

20. (previously presented) A method according to claim 18 wherein concentrate from the pneumatic flotation cell is sent to a final concentrate stream with the tailings from the pneumatic flotation cell being fed to the flotation circuit.

21. (canceled)

22. (canceled)